

REMARKS

Reconsideration of this application, as amended, is respectfully requested.

Claims 1-69 are pending. Claims 1-69 have been rejected.

Claims 1 and 34 have been amended. No claims have been canceled. No claims have been added. Support for the amendments is found in the specification, the drawings, and in the claims as originally filed. Applicants submit that the amendments do not add new matter.

Applicants reserve all rights with respect to the applicability of the Doctrine of Equivalents.

Claims 1-2, 4-7, 9-20, 23-30, 32-35, 37-40, 42-53, 56-63, 65-66 and 68 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,446,198 to Sazegari (hereinafter "Sazegari").

Applicants have amended claim 1 to include looking up simultaneously a plurality of entries from one or more look-up tables using the plurality of indices, the one or more look-up tables is configured from a plurality of look-up units, wherein each of said plurality of look-up units is a memory unit that is separate and distinct from others of said plurality of look-up units and is individually accessible independent of operations of the other look-up units.

Sazegari discloses a vectorized table look up. More specifically, Sazegari discloses "...logically dividing a large table into a number of smaller tables that can be uniquely indexed with a permute instruction. For instance, a 256-byte table can be logically divided into eight 32-byte tables. Each smaller table consists of two data vectors, which constitute the operands for the permute instruction." (col. 2, lines 17-23).

In particular, Sazegari discloses that "...the permute instruction can be used to perform 16 simultaneous lookup operations on a 32-byte entry table" ... [table 34, which consists of two 16-byte vectors, data1 and data2, **Figure 4**]. The permute instruction can be used to simultaneously read 16 values from these two vectors..." (col. 4, lines 24-32, **Figure 4**).

Thus, Sazegari merely discloses dividing a table into a number smaller tables, and performing the simultaneous look up operations to read the data from the smaller table. In contrast, amended claim 1 refers to looking up simultaneously a plurality of entries from one or more look-up tables using the plurality of indices, the one or more look-up tables is configured from a plurality of look-up units, wherein each of said plurality of look-up units is a memory unit that is separate and distinct from others of said plurality of look-up units and is individually accessible independent of operations of the other look-up units.

Because Sazegari fails to disclose all limitations of amended claim 1, applicants respectfully submit that amended claim 1 is not anticipated under 35 U.S.C. § 102(e) by Sazegari.

Given that amended claim 34 contain the limitations similar to those of amended claim 1, applicants respectfully submit that amended claim 34 is not anticipated under 35 U.S.C. § 102(e) by Sazegari.

Given that claims 2-33, and 35-69 depend from amended claims 1 and 34 respectively, and add additional limitations, applicants respectfully submit that claims 2-33, and 35-69 are not anticipated under 35 U.S.C. § 102(e) by Sazegari.

Sazegari teaches the vectorized table look up. Shams, in contrast, teaches variable accuracy indirect accessing scheme (Abstract). Furthermore, even if the vectorized table look up of Sazegari were combined with indirect accessing scheme of Shams, such a combination would still lack looking up simultaneously a plurality of entries from one or more look-up tables using the plurality of indices, the one or more look-up tables is configured from a plurality of look-up units, wherein each of said plurality of look-up units is a memory unit that is separate and distinct from others of said plurality of look-up units and is individually accessible independent of operations of the other look-up units, as recited in amended claim 1.


Given that claim 67 depend from amended claim 1, and add additional limitations, applicants respectfully submit that claim 67 is not obvious under 35 U.S.C. § 103(a) over Sazegari in view of Shams.

It is respectfully submitted that in view of the amendments and arguments set forth herein, the applicable rejections and objections have been overcome. If there are any additional charges, please charge Deposit Account No. 02-2666.

Respectfully submitted,

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